

Distribution of Houses by Predominant Materials of Roof and Wall and Level of Damage Risk

ODISHA

Wall / Roof		Census Houses		Level of Risk under									
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %	
				V	IV	III	II	55 & 50	47	44 & 39	33		
				Area in %				Area in %					
STATE - ODISHA						14.8	85.2	30.2	25.0	44.8		4.9	
WALL													
A1 - Mud & Unburnt Brick Wall	Rural	4,883,041	40.6										
	Urban	334,112	2.8										
	Total	5,217,153	43.4			M	L	VH	H	M		VH	
A2 - Stone Wall not packed with mortar	Rural	155,681	1.3										
	Urban	27,780	0.2										
	Total	183,461	1.5			M	L	H	M	L		VH	
Total - Category - A		5,400,614	44.9										
B - Burnt Bricks Wall & Stone wall packed with mortar	Rural	3,685,752	30.7										
	Urban	1,400,296	11.7										
	Total	5,086,048	42.4			L	VL	H	M	L		H/M	
Total - Category - B		5,086,048	42.3										
C1 - Concrete Wall	Rural	118,647	1.0										
	Urban	87,545	0.7										
	Total	206,192	1.7			VL	VL	L	VL	VL		L/VL	
C2 - Wood wall	Rural	294,534	2.5										
	Urban	32,928	0.3										
	Total	327,462	2.8			VL	VL	VH	H	M		H	
Total - Category - C		533,654	4.4										
X - Other Materials	Rural	910,213	7.6										
	Urban	88,160	0.7										
	Total	998,373	8.3			VL	VL	VH	H	M		VH	
Total - Category - X		998,373	8.3										
TOTAL HOUSES*		12,018,689											

ROOF												
R1 - Light Weight Sloping Roof	Rural	5,177,844	43.1									
	Urban	761,014	6.3									
	Total	5,938,858	49.4			L	VL	VH	VH	H		VH
R2 - Heavy Weight Sloping Roof	Rural	2,957,391	24.6									
	Urban	259,301	2.2									
	Total	3,216,692	26.8			L	VL	H	M	L		H
R3 - Flat Roof	Rural	1,912,633	15.9									
	Urban	950,506	7.9									
	Total	2,863,139	23.8	<i>Damage Risk as per that for the Wall supporting it</i>								
TOTAL HOUSES*		12,018,689										

Housing Category : Wall Types

Category - A : Buildings in field-stone, rural structures, unburnt brick houses, clay houses

Category - B : Ordinary brick building; buildings of the large block & prefabricated type, half-timbered structures, building in natural hewn stone

Category - C : Reinforced building, well built wooden structures

Category - X : Other materials not covered in A,B,C. These are generally light.

Notes : 1. Flood prone area includes that protected area which may have more severe damage under failure of protection works. In some other areas the local damage may be severe under heavy rains and choked drainage.

2. Damage Risk for wall types is indicated assuming heavy flat roof in categories A, B and C (Reinforced Concrete) building

3. Source of Housing Data : Census of Housing, GOI, 2011

Housing Category : Roof Type

Category - R1 - Light Weight (Grass, Thatch, Bamboo, Wood, Mud, Plastic, Polythene, GI Metal, Asbestos Sheets, Other Materials)

Category - R2 - Heavy Weight (Tiles, Stone/Slate)

Category - R3 - Flat Roof (Brick, Concrete)

EQ Zone V : Very High Damage Risk Zone (MSK > IX)

EQ Zone IV : High Damage Risk Zone (MSK VIII)

EQ Zone III : Moderate Damage Risk Zone (MSK VII)

EQ Zone II : Low Damage Risk Zone (MSK < VI)

Level of Risk : VH = Very High; H = High;

M = Moderate; L = Low; VL = Very Low

* Total No. of Houses excluding Vacant/Locked Houses